

REMARKS

Claims 1-5, 7-11, 13, and 15-19 are all the claims pending in the application.

Claims 2-5, 8-11, and 16-19 are currently amended to delete the phrase "all the limitations of which are incorporated herein by reference," which had been added in response to proposed Rule 37 CFR 1.75(b).

Applicants respectfully submit that entry of the currently amended claims above is proper because the currently amended claims will place the application in condition for allowance or in better form for appeal. Applicants further respectfully submit that no new matter is added to the currently amended claims, nor has the scope of the pending claims changed. Accordingly, no new issues are raised that necessitate a further search of the art.

Claims 2-5, 8-11, and 16-19 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 1-5, 7-11, 13, and 15-19 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent Application Publication No. 2003/0092438 to Moore et al., hereinafter, Moore, in view of U.S. Patent No. 6,385,770 to Sinander et al., hereinafter, Sinander, and further in view of U.S. Patent No. 7,107,329 to Schroder et al., hereinafter, Schroder.

Applicants respectfully traverse the rejections based on the following discussion.

I. The 35 U.S.C. §112, Second Paragraph, Rejection

Claims 2-5, 8-11, and 16-19 stand rejected under 35 U.S.C. §112, second paragraph.

The phrase "all the limitations of which are incorporated herein by reference," which had been added to all the dependent claims in response to proposed Rule 37 CFR 1.75(b) is now deleted from currently amended claims 2-5, 8-11, and 16-19, above.

For at least the reasons outlined above, withdrawal of the rejection of claims 2-5, 8-11, and 16-19 under U.S.C. §112, second paragraph, is respectfully solicited.

II. The 35 U.S.C. 103(a) Rejection over Moore, Sinander, and Schroder

A. The Moore Disclosure

As shown in Figs 3 and 4, Moore discloses that an upgrade or downgrade service

generally entails the installation of new application software or hardware on a secondary controller 54. At step 102, the secondary controller 54 has its application software or hardware 64 upgraded, or downgraded. At step 104, the secondary controller 54 prepares to assume control of the system 50; specifically, the secondary application 64 notifies the secondary control block version table 76 of the new application version number. Then, at step 106, the checkpoint service 82 communicates with the primary control block 70 and updates the control block version table 74 to indicate the new secondary application version. At step 107, the primary controller 52 begins to shutdown or quiesce. (Paragraph [0022], which is cited by the Final Action).

Moore also discloses that at step 108 the primary processor 58 reads the primary control block version table 74 and compares versions of the primary application 62 and secondary application 64. With the results, step 110 determines whether the change in the secondary application was an upgrade, a downgrade or no change. If step 110 determines that the new version is a downgrade, step 112 converts the saved state data to a format compatible to the older version running on the secondary processor 60, rewrites the converted data to the replica state databases 78, notifies the checkpointing service 82 and updates the replica state database 80. The process then continues to step 113 as shown in Fig. 4. If step 110 determines that the new version is an upgrade or no change, conversions of the state data may be delayed, and the process continues with step 114 wherein the primary controller 52 performs a shutdown of services and passes control of the system 50 to the secondary controller 54. (Paragraph [0023], which is cited by the Final Action).

Moore further discloses that at step 116, the secondary controller 54 takes over primary control of the system 50 and opens the checkpoint replica database 80 for read and write access. Next, at step 118, the system determines if the replica state data needs to be converted (i.e., the new application is an upgrade). If the replica state needs to be converted, step 120 converts the data to the new version format. After conversion, the secondary processor 60, which now controls the system 50, imports state data from the replica state database 80 to the local database at step 122. At step 122, normal operations may resume. (Paragraph [0024], which is cited by the Final Action).

B. The Sinander Disclosure

Sinander discloses combining identical upgrade tasks of individual upgrades and executing a plurality of sequential content upgrades, each corresponding to a single upgrade, in an upgrade framework (col. 2, lines 6-10, which are cited by the Final Action). The upgrade framework may also comprise tasks for forwarding dynamic data between dynamic tasks of sequential upgrade contents (col. 2, lines 57-59). The upgrade framework may at least comprise dumping databases or contents of data storage means from the source system to the target system and initializing the logging of dynamic data in an event log (col.2, lines 63-66).

Sinander also discloses that the upgrade operation is partitioned into an upgrade framework, the upgrade framework comprising tasks identical for each of the plurality software system upgrades, and into upgrade contents, each of the upgrade contents comprising tasks specific to the corresponding software system upgrade (col. 3, line 40-45).

Sinander further discloses that a first part of the upgrade framework consists of upgrade tasks to be executed at an initial stage of the upgrade operation, before executing the upgrade contents. A second part of the upgrade framework consists of upgrade tasks to be executed in a final stage of the upgrade operation (col. 3, lines 54-58, which are cited by the Final Action).

C. The Schroder Disclosure

Schroder discloses preparing new software information at one node from the original software and including revisions and upgrades; and after such preparing of the new software information in the one node during the continuing of the data routing along the path without interruption (col. 2, lines 16-21, which are cited by the Final Action).

D. Arguments

Independent claims 1, 7, 13, and 15 recite in relevant part,

"applying an upgrade to a first next level of software ... ;

...

applying an upgrade to a second next level of software ... ;

...

applying a downgrade to a first previous level of software ... ;

...

applying a downgrade to a second previous level of software"

The Final Action cites Sinander for disclosing a first part of an upgrade framework and a second part of an upgrade framework, which are asserted to be analogous to the applying an upgrade to a first next level of software and to the applying an upgrade to a second next level of software (and similarly, to the applying a downgrade to a first previous level of software and to the applying a downgrade to a second previous level of software). (Please see, Final Action, page 5, second paragraph, bullet points, and third paragraph). (emphases added).

However, Applicant respectfully argue that the first and second parts of the "upgrade framework" of Sinander are not analogous to the first and second next/previous levels of software to which upgrades/downgrades are applied. Instead, the first part of the upgrade framework of Sinander is defined as "consist[ing] of upgrade tasks to be executed at an initial stage of the upgrade operation, before executing the upgrade contents', while the second part of the "upgrade framework" of Sinander is defined as "consist[ing] of upgrade tasks to be executed in a final stage of the upgrade operation" (Sinander, (col. 3, lines 54-58). That is, the first and second parts of the upgrade framework of Sinander are, respectively, (1) identical (and common) tasks (or processes) that are to be performed initially in an upgrade to a version of software, and (2) after performing the initial tasks (i.e., first part of upgrade framework) then performing the upgrading of the contents of the upgrade (i.e., the second part of the upgrade framework).

In contrast, the present invention describes applying an upgrade/downgrade to a first next/previous level of software and applying an upgrade/downgrade to a second next/previous level of software. Upgrades and downgrades, not first and second groups of processes involved in an upgrade as described by Sinander, are applied to first and second levels of software (i.e., that is, a level of a software application in its entirety).

The Final Action states; "But [Moore] does not explicitly disclose about two-level software upgrading." (Final Action, page 5, printed line 5).

For at least the reasons outline above with respect to the disclosure of Sinander, Applicants respectfully submit that Sinander does not disclose, teach or suggest at least the present invention's features of "applying an upgrade to a first next level of software ... ; ... applying an upgrade to a second next level of software ... ; ... applying a downgrade to a first previous level of software ... ; ... applying a downgrade to a second previous level of software"

Schroder does not cure the deficiencies of Moore and Sinander. Nowhere does Schroder disclose, teach or suggest the present invention's feature of "applying an upgrade to a first next level of software ... ; ... applying an upgrade to a second next level of software ... ; ... applying a downgrade to a first previous level of software ... ; ... applying a downgrade to a second previous level of software"

Instead, Schroder discloses preparing new software information at one node from the original software and including revisions and upgrades; and after such preparing of the new software information in the one node during the continuing of the data routing along the path without interruption.

For at least the reasons outlined immediately above, Applicants respectfully submit that Moore, Sinander, and Schroder, either individually or in combination, do not disclose, teach or suggest the present invention's features of: "applying an upgrade to a first next level of software ... ; ... applying an upgrade to a second next level of software ... ; ... applying a downgrade to a first previous level of software ... ; ... applying a downgrade to a second previous level of software ... ", as recited in independent claims 1, 7, 13, and 15. Accordingly, Moore, Sinander, and Schroder, either individually or in combination, fail to render obvious the subject matter of independent claims 1, 7, 13, and 15, and dependent claims 2-5, 8-11, and 16-19 under 35 U.S.C. §103(a). Withdrawal of the rejection of claims 1-5, 7-11, 13, and 15-19 under 35 U.S.C. §103(a) as unpatentable over Moore, Sinander, and Schroder is respectfully solicited.

III. Formal Matters and Conclusion

Claims 1-5, 7-11, 13, and 15-19 are pending in the application.

Applicants respectfully submit that entry of the currently amended claims above is proper because the currently amended claims will place the application in condition for allowance or in better form for appeal. Applicants further respectfully submit that the scope of the pending claims changed. Accordingly, no new issues are raised that require a further search of the art.

With respect to the rejection of the claims over the cited prior art, Applicants respectfully argue that the present claims are distinguishable over the prior art of record. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 1-5, 7-11, 13, and 15-19, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest time possible.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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